better, though still rough, workmanship, was a small pipkin-like vessel, with its handle perfect. Some of these pieces were roughly and simply ornamented. Specimens from the uppermost level were clearly more modern.

Three of the caves yielded dark gray or black spindlewhorls of burnt clay, of fairly good workmanship.

The metal objects included a bronze fibula and ring, a silver coin supposed to be about the year 140, and iron arrow- and lance-heads of mediæval form.

We are grateful for this contribution to the palæontology and anthropology of Europe, and are encouraged by it to entertain the hope that Prof. Römer may be enabled to make arrangements for the complete and systematic exploration of at least one of the Ojcow caves at present untouched; and that sufficient means may be at his disposal to place the work under continued scientific superintendence.

OUR BOOK SHELF

Poisons: their Effects and Detection. By Alex. Wynter Blyth, M.R.C.S. (London: Charles Griffin and Co.,

THIS elaborate volume forms a part of the second edition of the author's treatise on "Practical Chemistry," which has been wisely split up into two volumes, one on "Foods," the other on "Poisons." Mr. Blyth's experience as a health-officer and public analyst guarantees that his conclusions are largely based on actual practice as a toxicologist; and the book will be found to abound in records of his own experiences.

But Mr. Blyth is also an accomplished linguist, and his book bears ample evidence of extensive reading, and a wide acquaintance with the European literature of toxicology. Almost every page teems with references to original memoirs in the French, German, and Italian languages; and this circumstance alone would render it an indispensable work of reference to be placed in the library of every toxicologist. But "Poisons" has other and distinguishing merits.

The general reader will find the introductory chapter on the old poison-lore of great interest, and replete with many but little known facts and fables relative to the history of poisons and their secret administration. Following on this we find a succinct account of the growth and development of the modern methods of chemically detecting poisons, at the end of which nearly three pages are devoted to a bibliography of the chief works on toxicology of the present century, in which we miss any reference to one of the most complete treatises on poisons extantthat forming the bulk of the seventeenth volume of Ziemssen's "Cyclopædia of Medicine."

In giving a scientific definition of a poison, Mr. Blyth somewhat enigmatically remarks that "The definition of a poison, in a scientific sense, should be broad enough to comprehend not only the human race, but the dual world of life, both animal and vegetable." He finally defines a poison thus:--"A substance of definite chemical composition, whether mineral or organic, may be called a poison, if it is capable of being taken into any living organisms, and causes, by its own inherent chemical nature, impairment or destruction of function." He excludes the bacteroid bodies met with in certain diseases, but apparently ignores the views of those observers who are of opinion that these organisms form or excrete true poisons of definite chemical constitutions.

A novelty in the work is the devotion of a section to what are termed "life-tests," i.e. the identification of poisons by their effects on living animals. This, and the elaborate instructions given on the authority of various writers, as to the methods to be adopted for separating and identi-

fying the various poisons, will be found invaluable to the analyst; and his only difficulty will be the choice of one out of the almost innumerable methods given for the separation of a single poison, say arsenic or opium.

THOMAS STEVENSON

Informe Official de la Comision científica agregada a estado mayor general de la Expedicion al Rio Negro (Patagonia) realizada en los meses de Abril, Mayo, y Junio de 1879, bajo las órdenes del General D. Julio A. Roca Entrega I. Zoologia (con 4 laminas). Part 1. 4to, 168 pp. (Buenos Ayres, 1881.)

IN 1879 the Government of the Argentine Republic despatched an expedition to the southern confines of their territory for the suppression of the hordes of Indians that had for many years previously rendered the district of the Rio Negro unsafe to travellers and to settlers. Under the command of General Roca these marauding savages were successfully driven off to the south of the Rio Negro, and a new frontier, which they are not allowed to cross northwards, was established. Roca (whose excellent example on this occasion it would be well if some of the Governments of Europe would follow) having invited a commission of scientific men to accompany his expedition, Dr. P. G. Lorentz and Mr. G. Niederlein were sent with him as botanical collectors, and Herr Schulz, Inspector of the Zoological Museum of Cordoba, as zoologist. The results of the last mentioned naturalist's labours are contained in the volume now before us, which has been prepared by Dr. A. Doering, with the assistance of Dr. Berg, Dr. Holmberg, and D. Enrique Lynch Arribálzaga, and is highly creditable to the youthful Academy of Natural Sciences of Cordoba, to whom, it would appear, the task of working out the scientific collections was intrusted.

Dr. Doering commences his labours by a chapter of general observations upon the fauna of the newly occupied territory, which he divides into four "zoogeographic zones"—(1) the region of the Southern Pampas; (2) the river-region of Northern Patagonia; (3) the central mountain-region; and (4) the eastern slopes of the Cordillera. The two last regions being very little known and not having been traversed by the expedition, are not discussed in the present essay, but the two former are sub-divided into minor districts, and the principal zoological characters of each of their subdivisions are pointed out. Lists are also given of the principal mammals, birds, amphibians, and land-mollusks that are chiefly peculiar

to the different districts.

Dr. Doering's instructive "zoogeographical" essay is followed by the systematic portion of the volume, in which the vertebrates and land-shells are treated of by the same naturalist, while his colleagues, Dr. Berg and Dr. Lynch Arribálzaga, have worked out the insects, and Dr. Holmberg the arachnidans. We have thus before us an excellent basis for a fauna of this hitherto little-known portion of the great Neotropical Region, which does credit alike to the Government of the Republic which instituted the investigation, and to the Academy of Natural Sciences of Cordoba, under whose auspices the work has been elaborated.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.

[The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to insure the appearance even of communications containing interesting and novel facts.]

Instinct

In his letter under this heading in last week's NATURE (p 428), Mr. Romanes says that I now admit that the actions of